

electrodes of each conductive sheet and adapted to carry a signal at a potential representative of a selected point on the sheet to which it is attached, and movable probe means for touching each of said sheets at said selected point in order to generate said signals and without altering the spacing between said conductive sheets.

2. A sensor as defined in claim 1 wherein said insulating means comprises a sheet of insulating material.

3. A sensor as defined in claim 1 wherein said electrical circuits include batteries floating with respect to each other and with respect to ground.

4. A sensor as defined in claim 1 wherein said probe means comprises a conductive grounded member adapted to puncture said sheets at the selected point thereon.

5. A sensor as defined in claim 1 wherein said probe means comprises a conductive grounded member adapted to touch said sheets at the selected point thereon without puncturing the sheets.

6. An electrical sensor of plane coordinates comprising, first and second sheets of conductive material spaced from each other and having a uniform resistivity throughout, each of said first and second conductive sheets having attached thereto a pair of electrodes equally spaced from each other across the sheet, a first sheet of insulating material separating said first and second sheets of conductive material, said first and second sheets of conductive material being juxtaposed to provide an indeterminate number of sets of plane coordinates in the form of equipotential lines normal to each other across the respective sheets of conductive material, first and second electrical circuits including said conductive sheets and floating with respect to each other and with respect to ground, a pair of conductors extending respectively from one of the electrodes of each conductive sheet and adapted to carry a signal at a potential representative of a selected point on the sheet to which it is attached, a grounded sheet of conductive material, a conductor extending from said grounded sheet and adapted to establish circuits through said pair of electrode-connected conductors, a second sheet of insulating material separating said grounded sheet and said second sheet of conductive material, and movable probe means for touching each of said sheets at the selected point corresponding to the desired coordinates of said first and second conductive sheets and thereby generating separate signals in each of said pair of conductors and without altering the spacing between said first and second sheets.

7. Apparatus as defined in claim 6 wherein said probe means comprises a conductive element adapted to puncture the first and second conductive sheets and to become grounded only upon touching said grounded sheet.

8. An electrical sensor of plane coordinates comprising first

and second sheets of conductive material having a uniform resistivity throughout, each of said first and second conductive sheets having attached thereto a pair of electrodes equally spaced from each other across the sheet, a first sheet of insulating material separating said first and second sheets of conductive material being juxtaposed to provide an indeterminate number of sets of plane coordinates in the form of equipotential lines normal to each other across the respective sheet surfaces, first and second electrical circuits including said conductive sheets and floating with respect to each other and with respect to ground, a pair of conductors extending respectively from one of the electrodes of each conductive sheet and adapted to carry a signal at a potential representative of a selected point on the sheet to which it is attached, third and fourth sheets of conductive material insulated from each other and with the third sheet being insulated from said second conductive sheet, third and fourth conductors extending respectively from said third and fourth conductive sheets and adapted to carry signals upon the grounding of said third and fourth sheets, and a movable grounded probe means for touching each of said sheets of conductive material at the selected point corresponding to the desired coordinates of said first and second conductive sheets thereby to generate separate signals in each of said conductors.

9. Apparatus as defined in claim 8 wherein said first and said second electrical circuits include potentiometers adapted to modify the signals carried in the respective first and second circuits.

10. Apparatus as defined in claim 8 wherein said third conductor is adapted to carry a "seek" signal for a plotter mechanism.

11. Apparatus as defined in claim 8 wherein said fourth conductor is adapted to carry an "enable" signal for a plotter mechanism.

12. For use in the electrical sensing of plane coordinates, a sheet of conductive material having a uniform resistivity throughout, a pair of electrodes attached to the sheet and equally spaced from each other to provide equipotential lines extending across the sheet, a conductor attached to one of said electrodes and floating with respect to ground for applying a potential across said sheet, and electrically conductive means for puncturing said sheet at a selected point on its surface thereby to effect the application of an electrical signal through said conductor attached to said one electrode and at a potential representative of the plane coordinate of said selected point on said sheet.

13. Apparatus as defined in claim 12 wherein said means for applying a potential across said sheet comprises a battery.

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